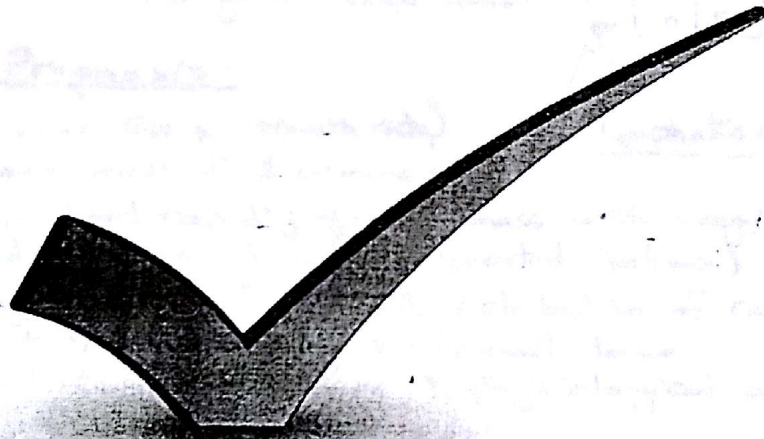


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Chirurgie - 5th year - Regional Surgery

Prep. By Dr. Ahmed Gamal

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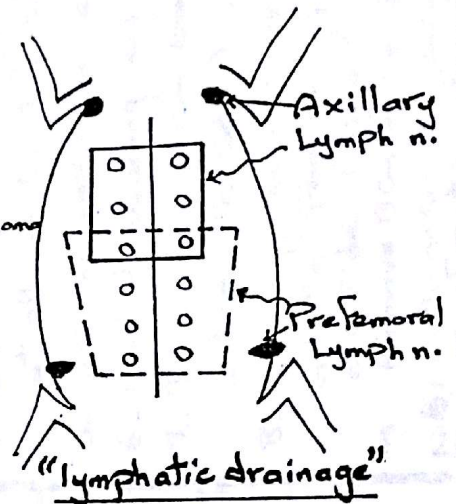
READ ME ...

Management of Mammary tumors in Bitch

- Most of mammary tumors occur due to Hormonal disturbance
- Spaying (oHE) in bitch greatly reduce the incidence of mammary tumors
 - 0.05% (oHE before First heat cycle)
 - 8% (oHE after First heat cycle)
 - 26% (oHE after Second heat cycle)

Mammary tumors in Bitch:

- | 50% Benign | 50% Malignant |
|-------------------|------------------------------------|
| 1. Simple adenoma | 1. Adenocarcinoma |
| 2. Fibroadenoma | 2. Papillary Adenocarcinoma |
| 3. Fibropapilloma | 3. Papillary cystic Adenocarcinoma |
| | 4. Osteosarcoma |
| | 5. Anaplastic Carcinoma |
| | 6. Malignant mixed tumor |



Diagnosis & Prognosis:

- History (Age, Sex, Spay, growth rate)
- Inspection (Large mass at 1 or more gland)
- Palpation (Large hard rapidly-growing mass with irregular size, and easily-bled with ulcerated surface)
- Histopathology (abnormal size & distribution of cells)
 - Differentiate bet. Benign & Malignant tumor
 - Differentiate bet. tumors & physiological edema
- Ultrasonography
 - Detection of mass
 - Detection of cystic ovaries (Predisposing factor)
- Lymph node biopsy

Treatment options

- Lumpectomy only (Removal of mass only)
 - * Disadv. → Recurrence usually occur
- Mamnectomy only (Removal of mammary gland with removal of regional L.n) → IF lymph node was not infiltrated
- Radical Mamnectomy (Total Unilateral mastectomy):
 - Removal of mammary gland + Muscles + Regional Lymph node
 - * 1st or 2nd or 3rd Pair → Removal of axillary L.n
 - * 3rd or 4th or 5th or 6th Pair → Removal of Prefemoral L.n
 - * 3rd Pair → Removal of Axillary + Prefemoral L.n
- Mamnectomy + oHE (In case of cystic ovaries)
- Euthanasia (IF metastasis is confirmed)

Dr. Jimmy



Therapy of eye neoplasms

Periocular Neoplasia

Lid Tumors

- Malignant tumor:
(e.g. SCC)
- Benign tumor:
(e.g. Fibropapilloma)
- Locally-invasive tumor:
(e.g. Equine Sarcoid)
→ Removed by sliding
Skin Flap technique using
H-shaped incision

Treatment

- Surgical excision:
 - Small tumor ($\downarrow$ $\frac{1}{3}$ eyelid)
→ V-plasty 
 - Large tumor ($\uparrow$ $\frac{1}{3}$ eye lid)
→ H-plasty 
- Cryosurgery
- Chemotherapy
- Radiation therapy
- Immunotherapy

3rd eye lid tumors

Malignant tumor
(e.g. SCC)

Treatment

- Small tumor →
excision of tumor only
From it's base by blunt
Scissors → suturing by
absorbable sutures
- If gland is infiltrated →
removal of gland from
it's base
- If 3rd eye lid is extensively
involved → 3rd eye lid
resection (excision of
the T-shaped cartilage
from it's base)

Ocular Neoplasia

Conjunctival tumors

Malignant
(e.g. SCC)

Eye ball tumors

Malignant
(e.g. SCC)

"Extirpation of eye ball"

- Anaesthesia & Control of animal
 - Upper & lower eye lids are suture together
making a stay suture (For grasping & traction)
 - Elliptical incision encircling the eye
($\frac{1}{2}$ cm from both lid margins)
 - Blunt dissection using curved scissors and
cut all muscles till reaching the orbital rim
 - Cut the optic nerve after ligation of it's base
 - Control bleeding by temporary pressure pack
 - Insert a 70 cm bandage (impregnated in
antiseptic soln.) in orbital cavity
 - Suturing the cut skin edges with leaving
a little portion of impregnated bandage
outside (through medial canthus)
 - Remove 15 cm of bandage every 3 days
- N.B: euthanasia is indicated in case of
rarefaction of orbital bone

Congenital affections of Eye Lid:

① Ablepharon: Congenital absence of eye lids

② Physiologic Ankyloblepharon: Fusion of eye lids

* ophthalmia neonatorum:

Swollen eye lids by Pus due to Staph. infection under the fused eye lids → draining discharges from medial canthus

* Treatment: Careful opening by warm compresses and gentle traction for drainage

③ Eye Lid Coloboma (Agenesis of eye lid):

Congenital Notching of eye lid with absence of eye lashes and exposure of cornea & conjunctiva

④ Dermoid Cyst: Cutaneous growth with Long hairs lying in different directions → Surgical excision then wound closure

⑤ Trichiasis: abnormal deviation of eye lashes

⑥ Distichiasis: Second abnormal row of lashes

⑦ Districhiasis: Multiple cilia arising from one follicle

⑧ Ectopic cilia: clusters of lashes that grow through conjunctiva

* Treatment:

Electro-epilation

⑨ Entropion: Rolling-in (inversion) of eye lid margins

* Symptoms: Epiphora, Blepharospasm, Conjunctivitis, Keratitis

* Treatment:

a) Non-surgical Treatment: Manual retraction of eye lid repeatedly with application of ophthalmic oint.

b) Surgical Treatment:

① Lid tacking (everting suture): Can correct entropion that respond to manual traction

→ done by using vertical mattress suture → Left for 7 days

② Reconstructive Techniques: Correct acquired entropion

I. Modified Hotz-celusus tech. → through crescentic incision

II. V-Y Blepharoplasty

III. Elliptical skin resection tech.

↳ closure of skin only (with 3-0 silk) without orbicularis oculi

⑩ Ectropion: Rolling-out (eversion) of eye lid margins

* Symptoms: Epiphora, Blepharospasm, Conjunctivitis, Keratitis

* Treatment:

V-Y Blepharoplasty

Dr. Jitendra

3

Periocular Sarcoid:

a non-malignant Locally-invasive Fibroelastic cutaneous neoplasm (Begin as small wart-like → reach tennis ball size)

*Treatment: Removed by Reconstructive eye lid Surgery (Sliding skin Flap technique through H-Shaped incision)

Protocol of therapy of eye lid tumors:

① Multiple Modals: Combination of different approaches

- Surgical excision
- Cryosurgery
- Hypothermia
- Immunotherapy
- Chemotherapy
- Radiation

② If Less than $\frac{1}{3}$ Length of eye lid → V-plasty

③ If More than $\frac{1}{3}$ Length of eye lid → Removed by other reconstructive techniques (e.g. H-shaped incision)

④ Lid tumors should be removed if:

- If reach $\frac{1}{4}$ - $\frac{1}{3}$ of eye lid Length
- If there is concern over malignancy
- If the mass is being traumatized or bleeding
- Presence of Corneal or Conjunctival irritation
- If the owner wants a more Cosmetic appearance

Treatment of neoplasms (SCC) of 3rd eye lid:

a) Small neoplasms at anterior surface of 3rd eye lid:

- excision of tumor from its base by blunt curved scissors
- Control bleeding → suturing by absorbable suture material

b) If 3rd eye lid gland is infiltrated by neoplasm → removal of the gland from its base

c) If 3rd eye lid is extensively-involved →

"3rd eye Lid Resection"

- Tranquilization in standing position
- Analgesia → Instillation of Lidocaine 0.5%
Local infilt. at base of 3rd eye lid
- Traction of 3rd eye lid with forceps
- Excision of cartilage with curved scissors
- Control of bleeding → Suture by absorbable suture



options For Surgical Correction of Cherry eye in dogs: (Prolapse of 3rd eye lid / nictating membrane)

1. Manual Reposition (Pushing back) of the prolapsed gland in it's pocket under local analgesia (small part)
2. Removal of only a portion of the gland or Tacking down the prolapsed part
3. Total Removal of Nictating gland itself
4. Removal of small amount of tissue from 3rd eye lid → then pushing the gland back → Suturing
5. Complete removal of 3rd eye lid (in case of large long-standing inflamed prolapsed part)

Treatment of KCS (Dry eye),

There are 3 goals for treatment of dry eye →

1. Correct the primary problem that ↓ tear level (if possible)
2. Stimulate tear glands to ↑ tear production → Cyclosporines
3. Supplement the eye with artificial tears → Tears guard

*Surgery:

① Canthoplasty (eye lid surgery):

To shorten the eye lid opening → decrease ocular surface exposure → Prevent tear film evaporation

② Marsipulization (Re-routing) one of the Salivary gland ducts to open at tear sac:

To allow Saliva to cover the eye

Treatment of Corneal wounds:

1. washing the eye with warm 3% Boric acid soln.
2. Search for presence of foreign body under L.A
3. Superficial defects → Tobramycin oint. (topically)

N.B: Tobradex is contraindicated to be used, because steroid retard healing of corneal wounds

4- Perforating wounds of cornea with prolapse of iris:

- Cut the prolapsed infected part of iris
- Suture the corneal wound with 3-0 silk
- Conjunctival Flap, to cover corneal wound
- 3rd eye lid Flap, to cover the conjunctival Flap

Dr. Jimmy



Ulcerative Keratitis (Corneal ulcer):

∞

* Treatment :

- a) Superficial & Deep Keratitis → Subconjunctival injection of Corticosteroid - antibiotic combination (day after day)
- b) ulcerative keratitis → washing the eye with warm 3% Boric acid soln., then:
 - Simple superficial ulcer: topical antibiotic (Besides correction of eyelid defect)
 - Uncomplicated deep ulcer: topical antibiotic + Debridement → then 3rd eyelid Flap
 - Complicated ulcer with Descematocele: Topical, Subconjunctival & systemic antibiotic → then 3rd eye lid Flap

Possible Complications of Corneal ulcer

- ① Opacity of cornea (Leucoma): Replacement of destroyed corneal tissues with white fibrous tissue → Loss of transparency of cornea and permanent opacity
- ② Keratocele: Protrusion of Descement's membrane due to erosion of superficial layer of cornea
- ③ Descementocele: Protrusion of descement's membrane through ruptured cornea
- ④ Corneal Fistulation: Complete rupture of cornea and the opening enter the anterior chamber
- ⑤ Anterior Synechia: Adhesion bet. Cornea & Iris
- ⑥ Posterior Synechia: Adhesion bet. Iris & Lens
- ⑦ Iris Prolapse: Partial or Complete protrusion of iris out through ruptured cornea
- ⑧ Iris Staphyloma: Prolapse of iris through ruptured cornea, which become covered with Fibrin Film

* Treatment :

- Surgical Resection (excision) of the prolapsed iris
- Conjunctival Flap over the resultant ulcer

Dr. Jimmy



Case/ a breeding Stallion was presented to your clinic suffering from Fever, Inappetence, unilateral Facial Swelling with mucopurulent unilateral nasal discharge. Upon examination of oral cavity we found a deep cavity at the upper last molar surround by Swollen gum. How can you manage such case ?!!

*Diagnosis:

a) Clinical Signs $\leftarrow$ Facial Swelling & Pain
Nasal Discharge

b) Examination of Oral Cavity:

- * obvious dental caries surrounded by alveolar periostitis
- * Probing $\rightarrow$ to detect depth of cavity

c) Radiographic examination:

- * $\uparrow$ radiodensity of Maxillary Sinus (Maxillary Sinus)
- * Probe is found reaching Maxillary Sinus

$\Rightarrow$ Animal is suffering from True Dental Fistula opening at maxillary Sinus

*Treatment of Case:

a) Extraction of the affected tooth: to Facilitate drainage of Pus and relief of alveolar Periostitis

b) Trephining of maxillary Sinus:

- Detect the site of maxillary Sinus
- Aseptic Preparations of site of operation
- General Anaesthesia (Lateral recumbency)
- Circular or Curved incision
- Elevation of Periosteum by Periosteal elevator
- Fixation of "trephining machine"
- Lavage of Sinus with Saline + Antiseptic (dil. Povidone iodine) $\rightarrow$ application of Foley Catheter
- Plug the Sinus with gauze
- closure of Periosteum $\rightarrow$ muscle $\rightarrow$ skin around cath. (while the trephining hole is left open)
- Daily drainage till draining clear fluid $\rightarrow$ Remove Catheter
- Daily admin. of Antibiotics & Anti-inflammatory for 5 days

Dr. Jimmy



2016/ Successful treatment of equine Cutaneous Pythiosis depend on diff. Factors such as size, duration, site of lesion, type of treatment & Immuno-competence of the animal. (Discuss)

* Factors

2012/ 2015/ A mare Presented with ulcerative, Pyogranulomatous, Pruritic saucer-shaped lesion located at ventral abdomen with discharges through numerous draining tracts, in addition to gritty, yellowish coral-like masses
Mention your initial diagnosis, Prognosis & Management

* Pythiosis → Diagnosis & D.D
→ Prognosis
→ Treatment

2014/ An abscess at the region bounded between xiphoid cartilage and left elbow of cow, The history of case revealed that the abscess was pointed at the most lower part and evacuated from pus, but still not respond since 4 weeks ago, animal suffered from recurrent tympany, loss of appetite and reduced milk yield.
Give your diagnosis, diff. diagnosis & treatment plan

* TRP (Traumatic ReticuloPeritonitis)

→ Diagnosis
→ Diff. diagnosis (From abscess → Respond to H)
→ Treatment (Rumenotomy)

2014/ a Five years old mare was admitted to your clinic suffering from odynophagia, Sialorrhea, arching and extension of neck towards the ground.
How would you diagnose & treat such case

* Choke (esophageal obstruction) → Diagnosis
→ Treatment

2013/ a dog suffered from discharges of highly-offensive odour from a narrow orifice below medial canthus of eye. How can you deal with such case

* True dental Fistula → Diagnosis & D.D From False D.F
→ Treatment

Dr. Jimmy



Anorectal Cases

2012/ Repair of third degree rectovestibular laceration in a mare by one stage repair
* Essam Mosbati technique

2013/ Third degree rectovestibular laceration in mare
* Essam Mosbati technique

2015/ Repair of rectovestibular Fistula in mare
ناخه لاله و فيستولا بين الحوض و
Perineum الحوض

- repair of vestibule by Horiz. mattress
- repair of rectum by Horiz. mattress

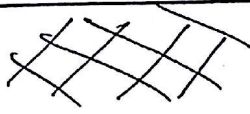
2014/ 2016/ Management of Anus Vaginalis

- a) Patent opening of atresia ani (سج)
- b) Reconstruction of septum bet. vagina & rectum
(By Cont. horizontal mattress)

2014/ Incomplete Prolapse with mucosal injury

- a) Suture the tear
- b) Submucosal Resection (سج)
- c) Rectal Amputation (سج)

مع الر Test Blockages

At level of:	Covered Test lesions	Congenital Test Blockage (1st calf heifer)	Acquired Test Blockage (2nd calf cows)	Test Blockages
a) Test orifice		- Imperforated test - Contracted sphincter	- Stricture of test orifice - Chronic fibrous test	Cong. + Acq.
b) Test canal	Cong. + Acq. Blockages	Atresia of test canal	- Hematoma - Contusion - Papilloma - Lactolith - Hypertrophy of Frustenburg Res. - Constriction of sphincter ms.	Cong. + Acq.
c) Test Sinus (cistern)	Cong. + Acq. blockages + Double test cistern	Atresia of test Sinus	- Test spider - Lactolith	Cong. + Acq.
d) junct. bet. test Sinus & gland Sinus	Persistent embryonic membrane Dr. Jimmy			

2016/ Tabulate one use For the Following Surgical techniques

Trephining	Viborg's Triangle	3 rd eyelid Flap	Herniorrhaphy
↓	↓	↓	↓
Drainage of Paranasal Sinus	Drainage of G.P in case of Guttural Pouch Emphyema	Management of Corneal ulcer	Treatment of Umbilical hernia

Q/ Enumerate 10 types of Fistulae affecting domestic animal and discuss how to manage. one of them?!

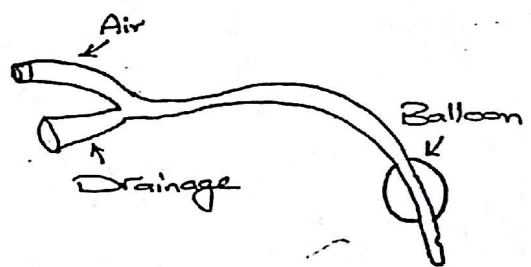
1. Fistulous withers
2. Dental Fistula (True & False)
3. Salivary Fistula
4. Rectovaginal Fistula
5. Teat Fistula (Knothole)
6. Ileo-umbilical Fistula
7. Abomaso-umbilical Fistula
8. Vesico-rectal Fistula
9. Vesico-uterine Fistula
10. Urethro-rectal Fistula

Q/ Role of Foley catheter in different surgeries of Urinary tract & Teats?!!

Foley Cath. : It is a double-way tube provide with inflatable balloon, made of Polyethylene (Flexible & durable)

* Advantages:

- 1) Double-way tube → Can be used for both drainage & administration of drugs
- 2) Has inflatable balloon → aid in Fixation and retention of Catheter.



* USES:

- a) Urological Surgeries → e.g. Tube cystostomy (Facilitate drainage of urine → Relief tension on Urethra)
- b) Teat Surgeries → e.g. open teat sinus Surgery (Prevent Faulty Cutting through teat, Keep the teat open after Surgery to prevent adhesions, admin. of antibiotics)
- c) Various UT & GIT Contrast radiographic Studies